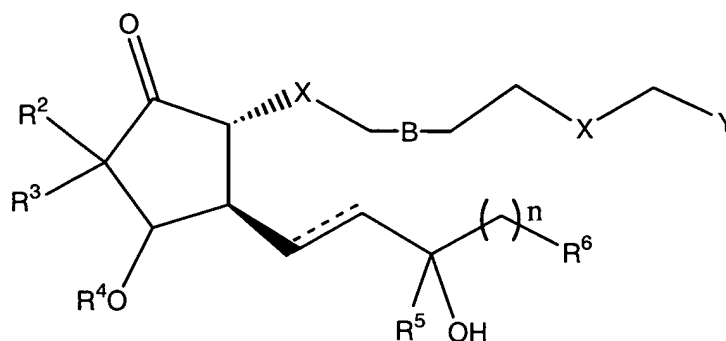


AMENDMENTS TO THE CLAIMS

1. (Previously Amended) A method of treating ocular hypertension or glaucoma which comprises administering to an animal having ocular hypertension or glaucoma a therapeutically effective amount of a compound represented by the general Formula I:



Formula I

wherein the dashed lines indicate the presence or absence of a bond, the hatched wedges indicate the α (down) configuration, and the solid triangles indicate the β (up) configuration;

B is a single, double, or triple covalent bond;

n is 0-6;

X is CH_2 , S or O;

Y is $\text{CONHCH}_2\text{CH}_2\text{OH}$ or $\text{CON}(\text{CH}_2\text{CH}_2\text{OH})_2$,

R^2 and R^3 are C_{1-6} linear alkyl which may be the same or different, and may be bonded to each other such that they form a ring incorporating the carbon to which they are commonly attached;

R^4 is hydrogen, R, $\text{C}(=\text{O})\text{R}$, or any group that is easily removed under physiological conditions such that R^4 is effectively hydrogen;

R is H, C_{1-6} alkyl or C_{2-6} alkenyl;

R^5 is hydrogen or R; and

R⁶ is

- i) hydrogen;
- ii) a linear or branched hydrocarbon containing between 1 and 8 carbon atoms, which may contain one or more double or triple bonds, or oxygen or halogen derivatives of said hydrocarbon, wherein 1-3 carbon or hydrogen atoms may be substituted by O or a halogen; or
- iii) aryloxy, heteroaryloxy, C₃₋₈ cycloalkyloxy, C₃₋₈ cycloalkyl, C₆₋₁₀ aryl or C₃₋₁₀ heteroaryl, wherein one or more carbons is substituted with N, O, or S; and which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy, C₆₋₁₀ aryl, C₃₋₁₀ heteroaryl, aryloxy, heteroaryloxy, C₁₋₆ alkyl, OR, SR, and SO₂R.

2. (Original) A method of treating ocular hypertension or glaucoma which comprises administering to an animal having ocular hypertension or glaucoma a therapeutically effective amount of a compound selected from the group consisting of

(3-((1*R*,4*S*,5*S*)-5-(3-chloro-benzo[*b*]thiophen-2-yl)-3-hydroxy-pent-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentylsulfanyl)-propylsulfanyl)-acetic acid methyl ester (**21**, **22**);

(3-((1*R*,4*S*,5*S*)-5-(3-chloro-benzo[*b*]thiophen-2-yl)-3-hydroxy-pent-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentylsulfanyl)-propylsulfanyl)-acetic acid (**23**, **24**);

(*Z*)-7-((1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl)-hept-5-ynoic acid methyl ester (**34**, **35**);

(*Z*)-7-((1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl)-hept-5-ynoic acid (**36**, **37**);

(*Z*)-7-((1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl)-hept-5-enoic acid methyl ester (**38**, **39**);

(*Z*)-7-((1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl)-hept-5-enoic acid (**40**, **41**);

(*Z*)-7-[(1*R*,4*S*,5*R*)-4-Hydroxy-5-((*E*)-3-hydroxy-5-phenyl-pent-1-enyl)-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid methyl ester (**50**, **51**)

(Z)-7-[(1R,4S,5R)-4-Hydroxy-5-((E)-3-hydroxy-5-phenyl-pent-1-enyl)-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (**52,53**)

(Z)-7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (**54,55**)

5 7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-heptanoic acid (**56,57**)

(Z)-7-[(1R,4S,5R)-5-(4-Benzo[b]thiophen-2-yl-3-hydroxy-butyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (**58,59**)

10 (Z)-7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid ethylamide (**60,61**)

(Z)-7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid diethylamide (**62,63**)

(Z)-7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (2-hydroxy-ethyl)-amide (**64,65**)

15 (3S,4R,5R)-4-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-3-hydroxy-2,2-dimethyl-5-[(Z)-6-(1-H-tetrazol-5-yl)-hex-2-enyl]-cyclopentanone (**66,67**) (Z)-7-

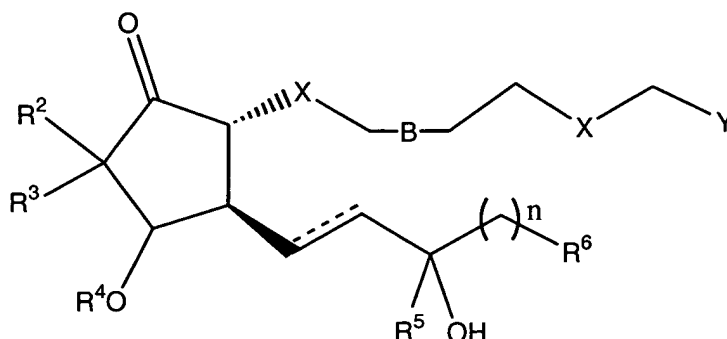
[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid amide (**68,69**)

20 (Z)-7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid methyl ester (**70,71**)

7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-ynoic acid methyl ester (**72,73**)

7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-ynoic acid (**74,75**).

25 3. (Original) A compound represented by Formula I:

**Formula I**

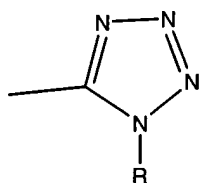
wherein the dashed lines indicate the presence or absence of a bond, the hatched wedges
 5 indicate the α (down) configuration, and the solid triangles indicate the β (up) configuration;

B is a single, double, or triple covalent bond;

n is 0-6;

X is CH_2 , S or O;

- 10 Y is any pharmaceutically acceptable salt of CO_2H , or CO_2R , CONR_2 , $\text{CONHCH}_2\text{CH}_2\text{OH}$, $\text{CON}(\text{CH}_2\text{CH}_2\text{OH})_2$, CH_2OR , $\text{P}(\text{O})(\text{OR})_2$, CONRSO_2R , SONR_2 , or



R is H, C_{1-6} alkyl or C_{2-6} alkenyl;

- 15 R^2 and R^3 are C_{1-6} linear alkyl which may be the same or different, and may be bonded to each other such that they form a ring incorporating the carbon to which they are commonly attached;

R^4 is hydrogen, R, $\text{C}(=\text{O})\text{R}$, or any group that is easily removed under physiological conditions such that R^4 is effectively hydrogen;

R^5 is hydrogen or R;

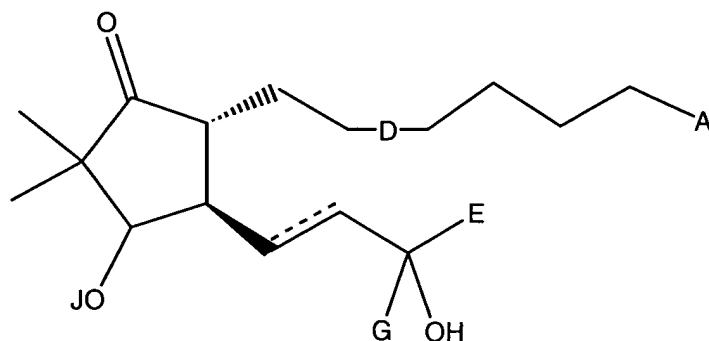
- 20 R^6 is

i) hydrogen;

ii) a linear or branched hydrocarbon containing between 1 and 8 carbon atoms, which may contain one or more double or triple bonds, or oxygen or halogen derivatives of said hydrocarbon, wherein 1-3 carbon or hydrogen atoms may be substituted by O or a halogen; or

5 iii) aryloxy, heteroaryloxy, C₃₋₈ cycloalkyloxy, C₃₋₈ cycloalkyl, C₆₋₁₀ aryl or C₃₋₁₀ heteroaryl, wherein one or more carbons is substituted with N, O, or S; and which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy, C₆₋₁₀ aryl, C₃₋₁₀ heteroaryl, aryloxy, heteroaryloxy, C₁₋₆ alkyl, OR, SR, and SO₂R; and

10 the compound of Formula I is not a compound of Formula II



Formula II

wherein A is CO₂H, CO₂Me, or CO₂Et;

D is a single, double, or triple covalent bond;

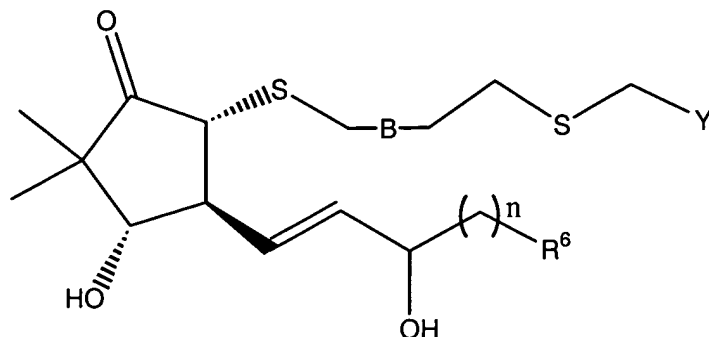
15 E is a linear, branched, or cycloalkyl chain of 3 to 7 carbons, trifluoromethylbutyl, hydroxylalkyl, or CH₂R⁷ wherein R⁷ is phenyl, cyclopentyl, phenoxy, chlorophenoxy, propoxy, or -CH₂SCH₂CH₃;

J is hydrogen, R, C(=O)R, or any group that is easily removed under physiological conditions such that R⁴ is effectively hydrogen; and

20 G is H or CH₃.

4. (Previously Amended) The compound of claim 3 wherein A is CO₂R⁸, wherein R⁸ is any linear, branched, or cyclic alkyl group having from 3 to 6 carbons.

5. (Currently Amended) The compound of claim 3 which is further represented by Formula III



Formula III

wherein Y is CO₂R, or any pharmaceutically acceptable salt of CO₂H.

5 6. (Previously Amended) The compound of claim 5 wherein R⁶ is C₆₋₁₀ aryl or C₃₋₁₀ heteroaryl, wherein one or more carbons is substituted with N, O, or S; and which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy, C₁₋₆ alkyl, OR, SR, and SO₂R.

7. (Previously Amended) The compound of claim 6 wherein R⁶ is naphthyl, benzofuranyl, or benzothienyl, which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy, C₁₋₆ alkyl, OR, SR, and SO₂R.

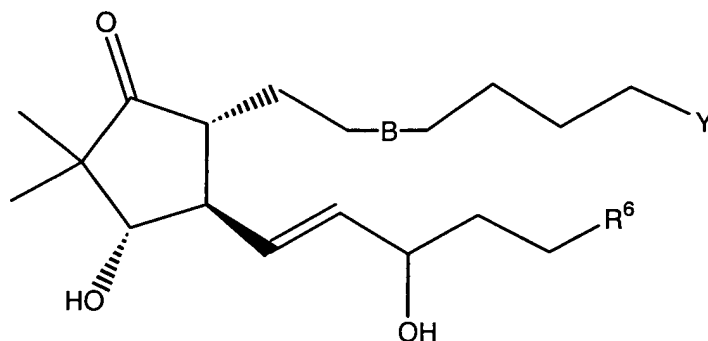
8. (Previously Amended) The compound of claim 7 wherein Y is CO₂H or CO₂Me.

9. (Previously Amended) The compound of claim 8 where R⁶ is 3-chlorobenzothien-2-yl.

10. (Previously Amended) The compound of claim 9 where n is 2.

11. (Previously Amended) The compound of claim 10 where B is a single bond.

12. (Previously Amended) The compound of claim 3 which is further represented by Formula IV

**Formula IV**

wherein Y is CO₂R or any pharmaceutically acceptable salt of CO₂H; and

R⁶ is C₆₋₁₀ aryl or C₃₋₁₀ heteroaryl, wherein one or more carbons is substituted with N, O, or S; and which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy, C₁₋₆ alkyl, OR, SR, and SO₂R.

13. (Previously Amended) The compound of claim 12 wherein Y is CO₂H or CO₂Me.

14. (Previously Amended) The compound of claim 13 wherein R⁶ is phenyl.

15. (Previously Amended) The compound of claim 14 wherein B is a double bond.

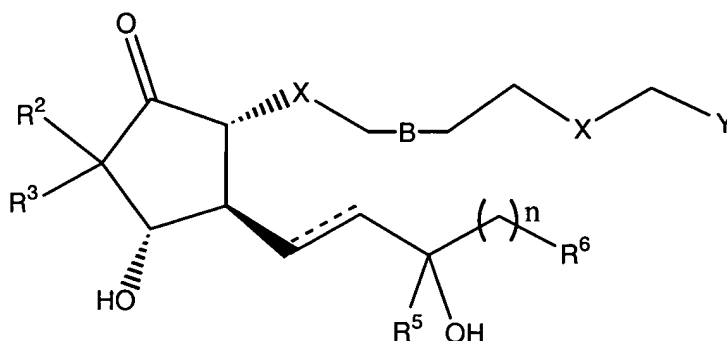
16. (Previously Amended) The compound of claim 13 wherein R⁶ is naphthyl,

10 benzofuranyl, or benzothienyl, which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy, C₁₋₆ alkyl, OR, SR, and SO₂R.

17. (Previously Amended) The compound of claim 16 wherein R⁶ is 3-chlorobenzothien-2-yl.

15 18. (Previously Amended) The compound of claim 17 wherein B is a double or triple bond.

19. (Previously Amended) The compound of claim 3 which is further represented by Formula V

**Formula V**

wherein at least one of R² and R³ is not methyl.

20. (Previously Amended) The compound of claim 19 wherein R² and R³ have a total number of carbon atoms of 6 or less.

5 21. (Previously Amended) The compound of claim 20 wherein R⁵ is hydrogen.

22. (Previously Amended) The compound of claim 3 wherein said compound is selected from the group consisting of

(3-((1*R*,4*S*,5*S*)-5-(3-chloro-benzo[*b*]thiophen-2-yl)-3-hydroxy-pent-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentylsulfanyl)-propylsulfanyl)-acetic acid methyl ester (**21**,

10 **22**);

(3-((1*R*,4*S*,5*S*)-5-(3-chloro-benzo[*b*]thiophen-2-yl)-3-hydroxy-pent-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentylsulfanyl)-propylsulfanyl)-acetic acid (**23**, **24**);

(*Z*)-7-((1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl)-hept-5-ynoic acid methyl ester (**34**, **35**);

15 (*Z*)-7-((1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl)-hept-5-ynoic acid (**36**,**37**);

(*Z*)-7-((1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl)-hept-5-enoic acid methyl ester (**38**,**39**);

(*Z*)-7-((1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl)-hept-5-enoic acid (**40**,**41**);

20

(*Z*)-7-[(1*R*,4*S*,5*R*)-4-Hydroxy-5-((*E*)-3-hydroxy-5-phenyl-pent-1-enyl)-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid methyl ester (**50**,**51**)

(Z)-7-[(1R,4S,5R)-4-Hydroxy-5-((E)-3-hydroxy-5-phenyl-pent-1-enyl)-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (**52,53**)

(Z)-7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (**54,55**)

5 7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-heptanoic acid (**56,57**)

(Z)-7-[(1R,4S,5R)-5-(4-Benzo[b]thiophen-2-yl-3-hydroxy-butyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (**58,59**)

10 (Z)-7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid ethylamide (**60,61**)

(Z)-7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid diethylamide (**62,63**)

(Z)-7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (2-hydroxy-ethyl)-amide (**64,65**)

15 (3S,4R,5R)-4-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-3-hydroxy-2,2-dimethyl-5-[(Z)-6-(1-H-tetrazol-5-yl)-hex-2-enyl]-cyclopentanone (**66,67**) (Z)-7-

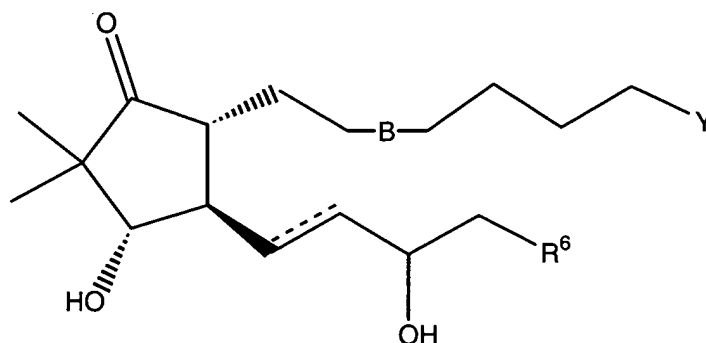
[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid amide (**68,69**)

20 (Z)-7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid methyl ester (**70,71**)

7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-ynoic acid methyl ester (**72,73**)

7-[(1R,4S,5R)-5-((E)-4-Benzo[b]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-ynoic acid (**74,75**).

25 23. (Previously Amended) The compound of claim 3 which is further represented by Formula XIII

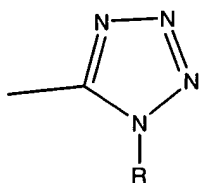
**Formula XIII**

wherein B represents a single or double bond;

and R⁶ is naphthyl, benzofuranyl, or benzothienyl, which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy, C₁₋₆ alkyl, OR, SR, and SO₂R.

24. (Previously Amended) The compound of claim 23 wherein R⁶ is benzothien-2-yl.

25. (Previously Amended) The compound of claim 24 wherein Y is any pharmaceutically acceptable salt of CO₂H, or CO₂R, CONR₂, CONHCH₂CH₂OH, CON(CH₂CH₂OH)₂, or

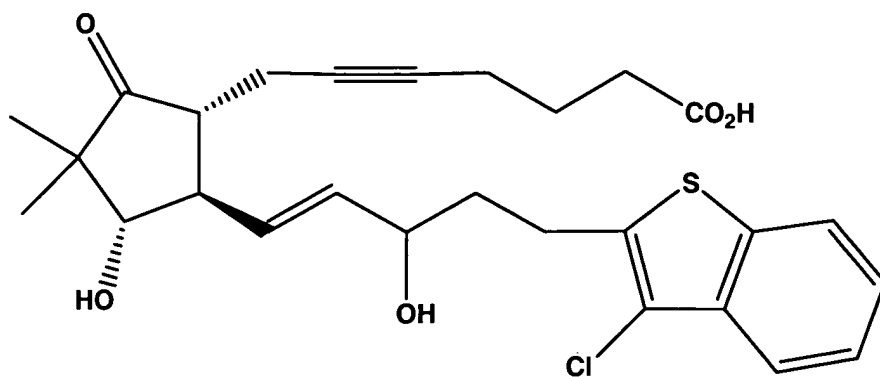


26. (Previously Amended) The compound of claim 25 wherein the dashed line indicates the presence of a bond and B is a double bond.

27. (Currently Amended) The compound of claim 25 wherein the dashed line indicates the presence of a bond and B is a single bond.

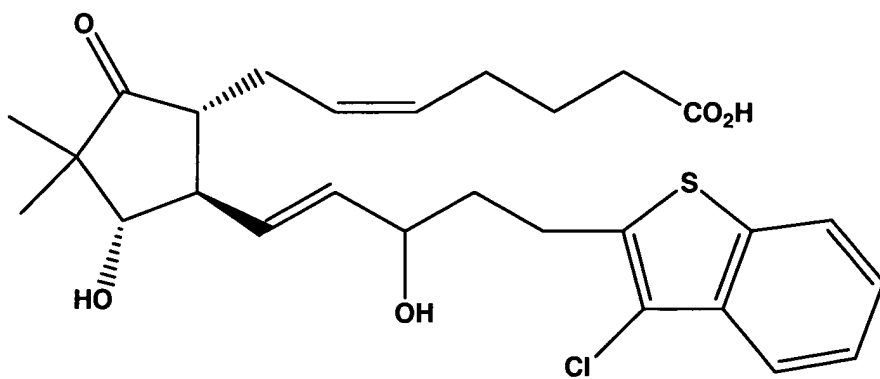
28. (Currently Amended) The compound of claim 25 wherein the dashed line indicates the absence of a bond and B is a double bond.

29. (New) The compound of claim 23 comprising



or a pharmaceutically acceptable salt or a prodrug thereof.

30. (New) The compound of claim 23 comprising



5 or a pharmaceutically acceptable salt or a prodrug thereof.